AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

- 1-20. (cancelled)
- 21. (currently amended) A method of cementing an oil or gas well, the method comprising:

providing a cement composition comprising water, cement, and low reactivity particles, wherein the <u>low reactivity</u> particles have a size of about 40 mesh to about 250 mesh, and wherein the <u>low reactivity</u> particles are present at a concentration of about 30 weight percent to about 100 weight percent, based on the weight of the cement;

pumping the composition into the oil or gas well; and allowing the composition to set[[;]],

wherein the composition fractures in a non-linear manner when set interfacial transition zones are formed around the low reactivity particles for non-linear fractures to form between particle boundaries.

- 22. (cancelled)
- 23. (original) The method of claim 21, wherein the water is present at a concentration of about 30 weight percent to about 150 weight percent, based on the weight of the cement.
- 24. (previously presented) The method of claim 21, wherein the cement is selected from the group consisting of API Class A cement, API Class B cement, API Class C cement, API Class G cement, and API Class H cement.
- 25. (previously presented) The method of claim 21, wherein the cement is selected from the group consisting of ASTM class I cement, ASTM class II cement, ASTM class IV cement, and ASTM class V cement.
- 26. (original) The method of claim 21, wherein the particles are silica sand.

- 27. (previously presented) The method of claim 21, wherein the particles are selected from the group consisting of aluminum silicate, gilsonite, ground coal, adamantane, and fullerene.
- 28. (cancelled)
- 29. (original) The method of claim 21, wherein the composition further comprises sand.
- 30. (original) The method of claim 21, wherein the composition further comprises gravel.

31-40. (cancelled)

- 41. (new) The method of claim 21, further comprising a dispersant, a salt, a set retarder, a gas control agent, a free fluid control agent, a biopolymer, a weighting material, a fluid loss agent, a bonding agent, an extender, a reinforcing agent, or a gel.
- 42. (new) The method of claim 41, wherein the weighting agent is hematite.
- 43. (new) The method of claim 41, wherein the fluid loss agent is a hydroxyethylcellulose and AMPS copolymer.
- 44. (new) The method of claim 41, wherein the bonding agent is polyvinyl alcohol.
- 45. (new) The method of claim 41, wherein the extender is sodium montmorillonite, sodium metasilicate, or sodium silicate.
- 46. (new) The method of claim 41, wherein the reinforcing agent is wollastonite, pyrophyllite, sepiolite, carbon whiskers, polypropylene whiskers, or nylon whiskers.